

a1
1. (Amended Once) A method for representing a given range of numbers with a plurality of entries, the method comprising:

determining whether a first set of numbers of the given range are representable as one or more entries that utilize wildcards;

representing the first set of numbers of the given range with one or more entries having one or more wildcards when such first set of numbers are representable as one or more entries that utilize wildcards; and

representing all numbers of a remaining one or more numbers of the given range that are not representable as one or more entries that utilize wildcards as entries that do not utilize wildcards,

wherein the entries are optimized such that a minimum number of entries are used to represent the given range.

a2
18. (Amended Once) A router for representing a given range of numbers with a plurality of entries, the router comprising:

a memory; and

a processor coupled to the memory,

wherein at least one of the memory and the processor are adapted to provide:

determining whether a first set of numbers of the given range are representable as one or more entries that utilize wildcards;

representing the first set of numbers of the given range with one or more entries having one or more wildcards when such first set of numbers are representable as one or more entries that utilize wildcards; and

representing all numbers of a remaining one or more numbers of the given range that are not representable as one or more entries that utilize wildcards as entries that do not utilize wildcards,

wherein the entries are optimized such that a minimum number of entries are used to represent the given range.

a3
28. (Amended Once) A computer readable medium containing programming instructions for representing a given range of numbers with a plurality of entries, the computer readable medium comprising:

computer code for determining whether a first set of numbers of the given range are representable as one or more entries that utilize wildcards;

computer code for representing the first set of numbers of the given range with one or more entries having one or more wildcards when such first set of numbers are representable as one or more entries that utilize wildcards; and

computer code for representing all numbers of a remaining one or more numbers of the given range that are not representable as one or more entries that utilize wildcards as entries that do not utilize wildcards,

wherein the entries are optimized such that a minimum number of entries are used to represent the given range.

30.(Amended Once) A computer system for representing a given range of numbers with a plurality of entries, the computer system comprising:

a memory; and

a processor coupled to the memory,

wherein at least one of the memory and the processor are adapted to provide:

determining whether a first set of numbers of the given range are representable as one or more entries that utilize wildcards;

representing the first set of numbers of the given range with one or more entries having one or more wildcards when such first set of numbers are representable as one or more entries that utilize wildcards; and

representing all numbers of a remaining one or more numbers of the given range that are not representable as one or more entries that utilize wildcards as entries that do not utilize wildcards,

wherein the entries are optimized such that a minimum number of entries are used to represent the given range.

REMARKS

Claims 1-33 remain pending. Claims 1, 18, 28, and 30 have been amended to clarify the invention.